



Launch Mission Execution Forecast

Mission: Falcon 9 Starlink-L25

Issued: 3 May 2021 / 0930L (1330Z)

Valid: 4 May 2021 / 1430 – 1602L (1830 – 2002Z)



Forecast Discussion: A high pressure ridge remains in place across Central Florida, keeping the weather associated with the low pressure area well north. Gusty southeasterly winds and isolated late afternoon showers and thunderstorms are possible in this pattern. On Tuesday, the unsettled weather associated with the low pressure area moves into the Southeast U.S., but remains mostly north of the Florida Peninsula, thanks to the strong high pressure ridge remaining across the area. The primary weather concerns Tuesday afternoon are the Cumulus Cloud Rule and Liftoff Winds. Wednesday's conditions begin to degrade as the ridge weakens and the low pressure area begins to drag a late-season cold front into North Florida. Surface winds will drop, but the Cumulus Cloud Rule remains a launch weather concern.

		Probability of Violating Weather Constraints															
Launch Day	20%	Primary Concerns: Cumulus Cloud Rule, Liftoff Winds															
	Weather Conditions			Additional Risk Criteria													
	Weather/Visibility: None / 7 mi.	<table border="1"> <thead> <tr> <th colspan="4">Clouds</th> </tr> <tr> <th>Type</th> <th>Coverage</th> <th>Base (ft)</th> <th>Tops (ft)</th> </tr> </thead> <tbody> <tr> <td>Cumulus</td> <td>Few</td> <td>3,000</td> <td>8,000</td> </tr> </tbody> </table>			Clouds				Type	Coverage	Base (ft)	Tops (ft)	Cumulus	Few	3,000	8,000	Upper-Level Wind Shear: Low
	Clouds																
Type	Coverage	Base (ft)	Tops (ft)														
Cumulus	Few	3,000	8,000														
Temp/Humidity: 80°F / 60%				Booster Recovery Weather: Moderate													
Liftoff Winds (200'): 160° 15-20 mph				Solar Activity: Low													
		Probability of Violating Weather Constraints															
24-Hour Delay	20%	Primary Concerns: Cumulus Cloud Rule															
	Weather Conditions			Additional Risk Criteria													
	Weather/Visibility: None / 7 mi.	<table border="1"> <thead> <tr> <th colspan="4">Clouds</th> </tr> <tr> <th>Type</th> <th>Coverage</th> <th>Base (ft)</th> <th>Tops (ft)</th> </tr> </thead> <tbody> <tr> <td>Cumulus</td> <td>Scattered</td> <td>3,000</td> <td>10,000</td> </tr> </tbody> </table>			Clouds				Type	Coverage	Base (ft)	Tops (ft)	Cumulus	Scattered	3,000	10,000	Upper-Level Wind Shear: Low
	Clouds																
Type	Coverage	Base (ft)	Tops (ft)														
Cumulus	Scattered	3,000	10,000														
Temp/Humidity: 83°F / 60%				Booster Recovery Weather: Moderate													
Liftoff Winds (200'): 190° 12-17 mph				Solar Activity: Low													
<i>Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear, booster recovery weather, and solar activity.</i>																	
Next Forecast Will Be Issued		As Required															